ABSTRACT OF THE DISCLOSURE

The invention relates to a method for producing a hardened profiled structural part from a hardenable steel alloy with cathodic corrosion protection, wherein:

a) a coating is applied to a sheet made of a hardenable steel alloy, wherein

b) the coating substantially consists of zinc, and

c) in addition the coating contains one or several elements with affinity to oxygen in a total amount of 0.1 weight-% to 15 weight-% in relation to the total coating, and

d) subsequently the coated sheet steel is roller-profiled in a profiling device, so that the sheet tape is formed into a roller-formed profiled strand, and

e) thereafter the coated sheet steel is brought, at least in parts and with the admission of atmospheric oxygen, to a temperature required for hardening and is heated to a structural change required for hardening, wherein

f) a skin made of an oxide of the element(s) with affinity to oxygen is formed on the surface of the coating, and

g) after sufficient heating the sheet is cooled, wherein the rate of cooling is set in such a way that hardening of the sheet alloy is achieved,

as well as to a corrosion-protection layer of the

method and a profiled structural element made thereof.